

8 Literaturverzeichnis

1. Matsushita S, Suzuki N. [Application of computer-assisted 3D imaging simulation for surgery]. *Nippon Rinsho* 1994;52(3):817-23.
2. Gunkel AR, Thumfart WF, Freysinger W. Computerunterstützte 3D-Navigationssysteme. Übersicht und Standortbestimmung. *Hno* 2000;48(2):75-90.
3. Nolte LP, Visarius H, Arm E, Langlotz F, Schwarzenbach O, Zamorano L. Computer-aided fixation of spinal implants. *J Image Guid Surg* 1995;1(2):88-93.
4. Krivonos O, Gebhard F, Keppler P, Kinzl L, Hesser J, Manner R. Computer assisted treatment of pelvis fractures. *Stud Health Technol Inform* 2001;81:242-6.
5. Klein M, Hein A, Lueth T, Bier J. Robot-assisted placement of craniofacial implants. *Int J Oral Maxillofac Implants* 2003;18(5):712-8.
6. Watzinger F, Wanschitz F, Wagner A, Enislidis G, Millesi W, Baumann A, et al. Computer-aided navigation in secondary reconstruction of post-traumatic deformities of the zygoma. *J Craniomaxillofac Surg* 1997;25(4):198-202.
7. Koele W, Stammberger H, Lackner A, Reittner P. Image guided surgery of paranasal sinuses and anterior skull base--five years experience with the InstaTrak-System. *Rhinology* 2002;40(1):1-9.
8. Klapan I, Barbir A, Simicic L, Risavi R, Besenski N, Bumber Z, et al. Dynamic 3D computer-assisted reconstruction of a metallic retrobulbar foreign body for diagnostic and surgical purposes. [Case report of orbital injury with ethmoid bone involvement]. *Orbit* 2001;20(1):35-49.
9. Reinhardt H, Trippel M, Westermann B, Gratzl O. Computer aided surgery with special focus on neuronavigation. *Comput Med Imaging Graph* 1999;23(5):237-44.
10. Satava RM. Emerging technologies for surgery in the 21st century. *Arch Surg* 1999;134(11):1197-202.

11. Maresceaux J, Soler L, Ceulemans R, Garcia A, Henri M, Dutson E. [Image fusion, virtual reality, robotics and navigation. Effects on surgical practice]. *Chirurg* 2002;73(5):422-7.
12. Endo M, Tsunoo T, Kandatsu S, Tanada S, Aradate H, Saito Y. Four-dimensional computed tomography (4D CT)--concepts and preliminary development. *Radiat Med* 2003;21(1):17-22.
13. Miles DA, Van Dis ML. Implant radiology. *Dent Clin North Am* 1993;37(4):645-68.
14. Wyatt CC, Pharoah MJ. Imaging techniques and image interpretation for dental implant treatment. *Int J Prosthodont* 1998;11(5):442-52.
15. Abrahams JJ. Dental CT imaging: a look at the jaw. *Radiology* 2001;219(2):334-45.
16. Frederiksen NL. X rays: what is the risk? *Tex Dent J* 1995;112(2):68-72.
17. Frederiksen NL, Benson BW, Sokolowski TW. Effective dose and risk assessment from computed tomography of the maxillofacial complex. *Dentomaxillofac Radiol* 1995;24(1):55-8.
18. Clark DE, Danforth RA, Barnes RW, Burtch ML. Radiation absorbed from dental implant radiography: a comparison of linear tomography, CT scan, and panoramic and intra-oral techniques. *J Oral Implantol* 1990;16(3):156-64.
19. Ngan DC, Kharbanda OP, Geenty JP, Darendeliler MA. Comparison of radiation levels from computed tomography and conventional dental radiographs. *Aust Orthod J* 2003;19(2):67-75.
20. Sawyer-Glover AM, Shellock FG. Pre-MRI procedure screening: recommendations and safety considerations for biomedical implants and devices. *J Magn Reson Imaging* 2000;12(1):92-106.

21. Hassfeld S. Navigationsverfahren in der Implantologie - Stand der Technik und Perspektiven. *Quintessenz Implantologie* 2000;373.
22. Arai Y, Tammissalo E, Iwai K, Hashimoto K, Shinoda K. Development of a compact computed tomographic apparatus for dental use. *Dentomaxillofac Radiol* 1999;28(4):245-8.
23. Terakado M, Hashimoto K, Arai Y, Honda M, Sekiwa T, Sato H. Diagnostic imaging with newly developed ortho cubic super-high resolution computed tomography (Ortho-CT). *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2000;89(4):509-18.
24. Hashimoto K, Arai Y, Iwai K, Araki M, Kawashima S, Terakado M. A comparison of a new limited cone beam computed tomography machine for dental use with a multidetector row helical CT machine. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2003;95(3):371-7.
25. Voßhans. Genaue Lagebestimmung der unteren Achter prae operationem. *ZM* 2005;95(2):132-36.
26. Kiefer H. Strahlenexposition von analogen und digitalen Zahnstaten und Panoramaschichtaufnahmen; 2004.
27. Cohnen M, Kemper J, Mobes O, Pawelzik J, Modder U. Radiation dose in dental radiology. *Eur Radiol* 2002;12(3):634-7.
28. Ito K, Gomi Y, Sato S, Arai Y, Shinoda K. Clinical application of a new compact CT system to assess 3-D images for the preoperative treatment planning of implants in the posterior mandible A case report. *Clin Oral Implants Res* 2001;12(5):539-42.
29. Minoretti R, Merz BR, Triaca A. Predetermined implant positioning by means of a novel guide template technique. *Clin Oral Implants Res* 2000;11(3):266-72.
30. Naitoh M, Ariji E, Okumura S, Ohsaki C, Kurita K, Ishigami T. Can implants be correctly angulated based on surgical templates used for osseointegrated dental implants? *Clin Oral Implants Res* 2000;11(5):409-14.

31. Fortin T, Champleboux G, Lormee J, Coudert JL. Precise dental implant placement in bone using surgical guides in conjunction with medical imaging techniques. *J Oral Implantol* 2000;26(4):300-3.
32. Randelzhofer P, de la Barrera JM, Spielberg M, Kurtz C, Strub JR. Three-dimensional navigation in oral implantology: a preliminary investigation. *Int J Periodontics Restorative Dent* 2001;21(6):617-26.
33. Schermeier OL, T. Methoden und Verfahren zur Navigation in der dentalen Implantologie. *Automatisierungstechnik* 2002:253-261.
34. Watzinger F, Birkfellner W, Wanschitz F, Millesi W, Schopper C, Sinko K, et al. Positioning of dental implants using computer-aided navigation and an optical tracking system: case report and presentation of a new method. *J Craniomaxillofac Surg* 1999;27(2):77-81.
35. Gaggl A, Schultes G, Karcher H. Navigational precision of drilling tools preventing damage to the mandibular canal. *J Craniomaxillofac Surg* 2001;29(5):271-5.
36. Birkfellner W, Solar P, Gahleitner A, Huber K, Kainberger F, Kettenbach J, et al. In-vitro assessment of a registration protocol for image guided implant dentistry. *Clin Oral Implants Res* 2001;12(1):69-78.
37. Schermeier OL, T. The Precision of the RoboDent System - An in vitro study. *Computer assisted Radiology and Surgery* 2002.
38. Meyer U, Wiesmann HP, Runte C, Fillies T, Meier N, Lueth T, et al. Evaluation of accuracy of insertion of dental implants and prosthetic treatment by computer-aided navigation in minipigs. *Br J Oral Maxillofac Surg* 2003;41(2):102-8.
39. Asvanund C, Morgano SM. Restoration of unfavorably positioned implants for a partially edentulous patient by using an overdenture retained with a milled bar and attachments: a clinical report. *J Prosthet Dent* 2004;91(1):6-10.

40. Rangert B, Krogh PH, Langer B, Van Roekel N. Bending overload and implant fracture: a retrospective clinical analysis. *Int J Oral Maxillofac Implants* 1995;10(3):326-34.
41. Taylor TD, Agar JR, Vogiatzi T. Implant prosthodontics: current perspective and future directions. *Int J Oral Maxillofac Implants* 2000;15(1):66-75.
42. Skalak R. Biomechanical considerations in osseointegrated prostheses. *J Prosthet Dent* 1983;49(6):843-8.
43. Rangert B, Jemt T, Jorneus L. Forces and moments on Branemark implants. *Int J Oral Maxillofac Implants* 1989;4(3):241-7.
44. Ueda C, Markarian RA, Sendyk CL, Lagana DC. Photoelastic analysis of stress distribution on parallel and angled implants after installation of fixed prostheses. *Pesqui Odontol Bras* 2004;18(1):45-52.
45. Walton JN, Huizinga SC, Peck CC, Naitoh M, Ariji E, Okumura S, et al. Implant angulation: a measurement technique, implant overdenture maintenance, and the influence of surgical experience. Can implants be correctly angulated based on surgical templates used for osseointegrated dental implants? *Int J Prosthodont* 2001;14(6):523-30.
46. Isidor F. Loss of osseointegration caused by occlusal load of oral implants. A clinical and radiographic study in monkeys. *Clin Oral Implants Res* 1996;7(2):143-52.
47. Lima Verde MA, Morgano SM, Hashem A. Technique to restore unfavorably inclined implants. *J Prosthet Dent* 1994;71(4):359-63.
48. Storum K, Carrick JL. Implant-osseous osteotomy for correction of the misaligned anterior maxillary implant. *Dent Clin North Am* 2001;45(1):181-7.
49. Walton JN, Huizinga SC, Peck CC, Rodriguez-Tizcareno MH. Implant angulation: a measurement technique, implant overdenture maintenance, and the influence of surgical experience. A double cast fixed detachable prosthesis for the correction of severely angulated implants. *Int J Prosthodont* 2001;14(6):523-30.

50. Grossmann Y, Madjar D. Prosthetic treatment for severely misaligned implants: a clinical report. *J Prosthet Dent* 2002;88(3):259-62.
51. Gulizio MP, Agar JR, Kelly JR, Taylor TD. Effect of implant angulation upon retention of overdenture attachments. *J Prosthodont* 2005;14(1):3-11.
52. Rosenquist B. Fixture placement posterior to the mental foramen with transpositioning of the inferior alveolar nerve. *Int J Oral Maxillofac Implants* 1992;7(1):45-50.
53. Smith DE, Zarb GA. Criteria for success of osseointegrated endosseous implants. *J Prosthet Dent* 1989;62(5):567-72.
54. Akca K, Iplikcioglu H, Cehreli MC. A surgical guide for accurate mesiodistal paralleling of implants in the posterior edentulous mandible. *J Prosthet Dent* 2002;87(2):233-5.
55. Zechner W, Bernhart T, Zauza K, Celar A, Watzek G. Multidimensional osteodistraction for correction of implant malposition in edentulous segments. *Clin Oral Implants Res* 2001;12(5):531-8.
56. Watanabe F, Hata Y, Mataga I, Yoshie S. Retrieval and replacement of a malpositioned dental implant: a clinical report. *J Prosthet Dent* 2002;88(3):255-8.
57. Hallman M, Carlsson B. Surgical correction of malpositioned implants. A case report. *Clin Oral Implants Res* 1996;7(4):316-9.
58. Becker W, Becker BE, Newman MG, Nyman S. [Clinical and microbiological findings, that can cause failure of dental implants]. *Quintessenz* 1991;42(1):9-21.
59. Gittelsohn GL. Vertical dimension of occlusion in implant dentistry: significance and approach. *Implant Dent* 2002;11(1):33-40.
60. Davidoff SR. Restorative-based treatment planning: determining adequate support for implant-retained fixed restorations. *Implant Dent* 1996;5(3):179-84.

61. Dixon DL, Breeding LC, Sadler JP, McKay ML. Comparison of screw loosening, rotation, and deflection among three implant designs. *J Prosthet Dent* 1995;74(3):270-8.
62. Watanabe F, Uno I, Hata Y, Neuendorff G, Kirsch A. Analysis of stress distribution in a screw-retained implant prosthesis. *Int J Oral Maxillofac Implants* 2000;15(2):209-18.
63. Perel ML. Parafunctional habits, nightguards, and root form implants. *Implant Dent* 1994;3(4):261-3.
64. Odman J, Lekholm U, Jemt T, Thilander B. Osseointegrated implants as orthodontic anchorage in the treatment of partially edentulous adult patients. *Eur J Orthod* 1994;16(3):187-201.
65. Lindquist LW, Rockler B, Carlsson GE. Bone resorption around fixtures in edentulous patients treated with mandibular fixed tissue-integrated prostheses. *J Prosthet Dent* 1988;59(1):59-63.
66. Quirynen M, Naert I, van Steenberghe D. Fixture design and overload influence marginal bone loss and fixture success in the Branemark system. *Clin Oral Implants Res* 1992;3(3):104-11.
67. Kopp KC, Koslow AH, Abdo OS. Predictable implant placement with a diagnostic/surgical template and advanced radiographic imaging. *J Prosthet Dent* 2003;89(6):611-5.
68. Mericske-Stern R, Assal P, Mericske E, Burgin W. Occlusal force and oral tactile sensibility measured in partially edentulous patients with ITI implants. *Int J Oral Maxillofac Implants* 1995;10(3):345-53.
69. Carr AB, Laney WR. Maximum occlusal force levels in patients with osseointegrated oral implant prostheses and patients with complete dentures. *Int J Oral Maxillofac Implants* 1987;2(2):101-8.

70. Zitzmann N SP. Die prothetisch determinierte Implantatplanung. Quintessenz Implantologie 1998;4:363-379.
71. Marchack CB. A custom titanium abutment for the anterior single-tooth implant. J Prosthet Dent 1996;76(3):288-91.
72. Salinas TJ, Sadan A. Establishing soft tissue integration with natural tooth-shaped abutments. Pract Periodontics Aesthet Dent 1998;10(1):35-42; quiz 44.
73. Wichmann M. Neue CAD/CAM Technologie zur Herstellung individueller Distanzhülsen und Vollkeramikronen auf Implantaten. Quintessenz Implantologie 2000;3(Sonderdruck).
74. Van Iperen O. Der Einsatz individueller Keramikabutments in der Implantatprothetik. Quintessenz Zahntechnik 2001:744-754.
75. Al-Ansari BH, Morris RR. Placement of dental implants without flap surgery: a clinical report. Int J Oral Maxillofac Implants 1998;13(6):861-5.
76. Saadoun AP. Single tooth implant restoration: surgical management for aesthetic results. Int J Dent Symp 1995;3(1):30-5.
77. Lazzara RJ. Managing the soft tissue margin: the key to implant aesthetics. Pract Periodontics Aesthet Dent 1993;5(5):81-8.
78. Parel SM. Aesthetics and osseointegration. Dent Today 1990;9(1):50-1.
79. Campelo LD, Camara JR. Flapless implant surgery: a 10-year clinical retrospective analysis. Int J Oral Maxillofac Implants 2002;17(2):271-6.
80. Gaggl ASG. Die Verwendung einer Schleimhautstanze bei der Insertion von Implantaten. Quintessenz Implantologie 2001:63-69.
81. Gaggl A, Schultes G, Rainer H, Karcher H. The transgingival approach for placement of distraction implants. J Oral Maxillofac Surg 2002;60(7):793-6.

82. Auty C, Siddiqui A. Punch technique for preservation of interdental papillae at nonsubmerged implant placement. *Implant Dent* 1999;8(2):160-6.
83. Kan JY, Rungcharassaeng K, Ojano M, Goodacre CJ. Flapless anterior implant surgery: a surgical and prosthodontic rationale. *Pract Periodontics Aesthet Dent* 2000;12(5):467-74; quiz 476.
84. Tarnow DP, Magner AW, Fletcher P. The effect of the distance from the contact point to the crest of bone on the presence or absence of the interproximal dental papilla. *J Periodontol* 1992;63(12):995-6.
85. Grunder U. The inlay-graft technique to create papillae between implants. *J Esthet Dent* 1997;9(4):165-8.
86. Adell R, Lekholm U, Rockler B, Branemark PI. A 15-year study of osseointegrated implants in the treatment of the edentulous jaw. *Int J Oral Surg* 1981;10(6):387-416.
87. Abbou M. Primary stability and osseointegration: preliminary clinical results with a tapered diminishing-thread implant. *Pract Proced Aesthet Dent* 2003;15(2):161-8; quiz 170.
88. Friberg B, Jemt T, Lekholm U. Early failures in 4,641 consecutively placed Branemark dental implants: a study from stage 1 surgery to the connection of completed prostheses. *Int J Oral Maxillofac Implants* 1991;6(2):142-6.
89. Lekholm UZG. Patient selection and preparation; 1985.
90. Misch CE. Density of bone: effect on treatment plans, surgical approach, healing, and progressive boen loading. *Int J Oral Implantol* 1990;6(2):23-31.
91. Quirynen M, Lamoral Y, Dekeyser C, Peene P, van Steenberghe D, Bonte J, et al. CT scan standard reconstruction technique for reliable jaw bone volume determination. *Int J Oral Maxillofac Implants* 1990;5(4):384-9.

92. Hounsfield GN. Nobel Award address. Computed medical imaging. *Med Phys* 1980;7(4):283-90.
93. Jaffin RA, Berman CL. The excessive loss of Branemark fixtures in type IV bone: a 5-year analysis. *J Periodontol* 1991;62(1):2-4.
94. Trisi P, Rao W. Bone classification: clinical-histomorphometric comparison. *Clin Oral Implants Res* 1999;10(1):1-7.
95. Friberg B, Sennerby L, Roos J, Lekholm U. Identification of bone quality in conjunction with insertion of titanium implants. A pilot study in jaw autopsy specimens. *Clin Oral Implants Res* 1995;6(4):213-9.
96. Davies JE. Mechanisms of endosseous integration. *Int J Prosthodont* 1998;11(5):391-401.
97. Buser D, Nydegger T, Hirt HP, Cochran DL, Nolte LP. Removal torque values of titanium implants in the maxilla of miniature pigs. *Int J Oral Maxillofac Implants* 1998;13(5):611-9.
98. Johnson BW. HA-coated dental implants: long-term consequences. *J Calif Dent Assoc* 1992;20(6):33-41.
99. Cheang P, Khor KA. Addressing processing problems associated with plasma spraying of hydroxyapatite coatings. *Biomaterials* 1996;17(5):537-44.
100. O'Sullivan D, Sennerby L, Meredith N. Measurements comparing the initial stability of five designs of dental implants: a human cadaver study. *Clin Implant Dent Relat Res* 2000;2(2):85-92.
101. Langer B, Langer L, Herrmann I, Jorneus L. The wide fixture: a solution for special bone situations and a rescue for the compromised implant. Part 1. *Int J Oral Maxillofac Implants* 1993;8(4):400-8.

102. Davarpanah M, Martinez H, Tecucianu JF, Celletti R, Lazzara R. Small-diameter implants: indications and contraindications. *J Esthet Dent* 2000;12(4):186-94.
103. DelBalso AM, Greiner FG, Licata M. Role of diagnostic imaging in evaluation of the dental implant patient. *Radiographics* 1994;14(4):699-719.
104. Glauser R NR. Die Osteotomietechnik- eine Alternative Aufbereitungsmethode des Implantatlagers in der posterioren Maxilla. *Quintessenz Implantologie* 1998:103-120.
105. Orenstein IH, Tarnow DP, Morris HF, Ochi S. Factors affecting implant mobility at placement and integration of mobile implants at uncovering. *J Periodontol* 1998;69(12):1404-12.
106. Martinez H, Davarpanah M, Missika P, Celletti R, Lazzara R. Optimal implant stabilization in low density bone. *Clin Oral Implants Res* 2001;12(5):423-32.
107. Piattelli A, Trisi P, Romasco N, Emanuelli M. Histologic analysis of a screw implant retrieved from man: influence of early loading and primary stability. *J Oral Implantol* 1993;19(4):303-6.
108. Meredith N. Assessment of implant stability as a prognostic determinant. *Int J Prosthodont* 1998;11(5):491-501.
109. Ericsson I, Randow K, Nilner K, Peterson A. Early functional loading of Branemark dental implants: 5-year clinical follow-up study. *Clin Implant Dent Relat Res* 2000;2(2):70-7.
110. Henry P, Rosenberg I. Single-stage surgery for rehabilitation of the edentulous mandible: preliminary results. *Pract Periodontics Aesthet Dent* 1994;6(9):15-22; quiz 24.
111. Degidi M, Piattelli A. Immediate functional and non-functional loading of dental implants: a 2- to 60-month follow-up study of 646 titanium implants. *J Periodontol* 2003;74(2):225-41.

112. Becker W, Wong J. Early functional loading in the fully edentulous mandible after mandibular resection and reconstruction due to an ameloblastoma: case report. *Clin Implant Dent Relat Res* 2003;5(1):47-51.
113. Austin BW, Stevenson AR, Hogan PF, Walton TR. Same day teeth--Sydney style: immediate functional loading of Branemark dental implants in the anterior mandible. *Ann R Australas Coll Dent Surg* 2000;15:340-2.
114. Chee W, Jivraj S. Efficiency of immediately loaded mandibular full-arch implant restorations. *Clin Implant Dent Relat Res* 2003;5(1):52-6.
115. Szmukler-Moncler S, Piattelli A, Favero GA, Dubruille JH. Considerations preliminary to the application of early and immediate loading protocols in dental implantology. *Clin Oral Implants Res* 2000;11(1):12-25.
116. Vassos DM. Single-stage surgery for implant placement: a retrospective study. *J Oral Implantol* 1997;23(4):181-5.
117. Horiuchi K, Uchida H, Yamamoto K, Sugimura M. Immediate loading of Branemark system implants following placement in edentulous patients: a clinical report. *Int J Oral Maxillofac Implants* 2000;15(6):824-30.
118. Degidi M, Piattelli A. Immediately loaded bar-connected implants with an anodized surface inserted in the anterior mandible in a patient treated with diphosphonates for osteoporosis: a case report with a 12-month follow-up. *Clin Implant Dent Relat Res* 2003;5(4):269-72.
119. Degidi M, Pieri F, Marchetti C, Piattelli A. Immediate loading of dental implants placed in distracted bone: a case report. *Int J Oral Maxillofac Implants* 2004;19(3):448-54.
120. McKibbin B. The biology of fracture healing in long bones. *J Bone Joint Surg Br* 1978;60-B(2):150-62.

121. Albrektsson T, Branemark PI, Hansson HA, Lindstrom J. Osseointegrated titanium implants. Requirements for ensuring a long-lasting, direct bone-to-implant anchorage in man. *Acta Orthop Scand* 1981;52(2):155-70.
122. Carlsson L, Rostlund T, Albrektsson B, Albrektsson T. Implant fixation improved by close fit. Cylindrical implant-bone interface studied in rabbits. *Acta Orthop Scand* 1988;59(3):272-5.
123. Schnitman PA, Wohrle PS, Rubenstein JE, DaSilva JD, Wang NH. Ten-year results for Branemark implants immediately loaded with fixed prostheses at implant placement. *Int J Oral Maxillofac Implants* 1997;12(4):495-503.
124. Bahat O. Treatment planning and placement of implants in the posterior maxillae: report of 732 consecutive Nobelpharma implants. *Int J Oral Maxillofac Implants* 1993;8(2):151-61.
125. Schliephake H. Konzepte zur Verkürzung der Behandlungsdauer. *Quintessenz Implantologie* 2001:357-372.
126. Tjellstrom A, Granstrom G. One-stage procedure to establish osseointegration: a zero to five years follow-up report. *J Laryngol Otol* 1995;109(7):593-8.
127. McCutchen JW, Collier JP, Mayor MB. Osseointegration of titanium implants in total hip arthroplasty. *Clin Orthop* 1990(261):114-25.
128. Whiteside LA, Arima J, White SE, Branam L, McCarthy DS. Fixation of the modular total hip femoral component in cementless total hip arthroplasty. *Clin Orthop* 1994(298):184-90.
129. Pogrel MA, Kaban LB. Injuries to the inferior alveolar and lingual nerves. *J Calif Dent Assoc* 1993;21(1):50-4.
130. Dao TT, Mellor A. Sensory disturbances associated with implant surgery. *Int J Prosthodont* 1998;11(5):462-9.

131. Ellies LG, Hawker PB. The prevalence of altered sensation associated with implant surgery. *Int J Oral Maxillofac Implants* 1993;8(6):674-9.
132. Bartling R, Freeman K, Kraut RA. The incidence of altered sensation of the mental nerve after mandibular implant placement. *J Oral Maxillofac Surg* 1999;57(12):1408-12.
133. Nazarian Y, Eliav E, Nahlieli O, Wismeijer D, van Waas MA, Vermeeren JI, et al. [Nerve injury following implant placement: prevention, diagnosis and treatment modalities]. Patients' perception of sensory disturbances of the mental nerve before and after implant surgery: a prospective study of 110 patients. *Refuat Hapeh Vehashinayim* 2003;20(3):44-50, 101.
134. Laboda G. Life-threatening hemorrhage after placement of an endosseous implant: report of case. *J Am Dent Assoc* 1990;121(5):599-600.
135. Mason ME, Triplett RG, Alfonso WF. Life-threatening hemorrhage from placement of a dental implant. *J Oral Maxillofac Surg* 1990;48(2):201-4.
136. Boyes-Varley JG, Lownie JF. Haematoma of the floor of the mouth following implant placement. *Sadj* 2002;57(2):64-5.
137. Weibrich G, Foitzik C, Kuffner H. [Life threatening oral hemorrhage after implantation into the distal right mandible]. *Mund Kiefer Gesichtschir* 2002;6(6):442-5.
138. Walton JN. Altered sensation associated with implants in the anterior mandible: a prospective study. *J Prosthet Dent* 2000;83(4):443-9.
139. Ellies LG, Walton JN, Dao TT, Mellor A, Bartling R, Freeman K, et al. Altered sensation following mandibular implant surgery: a retrospective study. Altered sensation associated with implants in the anterior mandible: a prospective study. Sensory disturbances associated with implant surgery. The incidence of altered sensation of the mental nerve after mandibular implant placement. *J Prosthet Dent* 1992;68(4):664-71.

140. Mason ME, Triplett RG, Van Sickels JE, Parel SM. Mandibular fractures through endosseous cylinder implants: report of cases and review. *J Oral Maxillofac Surg* 1990;48(3):311-7.
141. Schug T, Dumbach J, Rodemer H. [Mandibular fracture. An unusual implantation complication]. *Mund Kiefer Gesichtschir* 1999;3(6):335-7.
142. Meijer HJ, Raghoobar GM, Visser A. Mandibular fracture caused by peri-implant bone loss: report of a case. *J Periodontol* 2003;74(7):1067-70.
143. Worthington P. Medicolegal aspects of oral implant surgery. *Aust Prosthodont J* 1995;9 Suppl:13-7.
144. Curley AW. Dental implant jurisprudence: avoiding the legal failures. *J Indiana Dent Assoc* 2002;81(3):29-34.
145. Scribano E, Ascenti G, Mazziotti S, Blandino A, Racchiusa S, Gualniera P. Computed tomography in dental implantology: medico-legal implications. *Radiol Med (Torino)* 2003;105(1-2):92-9.
146. Givol N, Taicher S, Halamish-Shani T, Chaushu G. Risk management aspects of implant dentistry. *Int J Oral Maxillofac Implants* 2002;17(2):258-62.
147. Petropoulos VC, Balshi TJ, Balshi SF, Wolfinger GJ. Extractions, implant placement, and immediate loading of mandibular implants: a case report of a functional fixed prosthesis in 5 hours. *Implant Dent* 2003;12(4):283-90.
148. Schermeier O, Lueth T, Glagau J, Szymanski D, Tita R, Hildebrand D, et al. Automatic patient registration in computer assisted maxillofacial surgery. *Stud Health Technol Inform* 2002;85:461-7.
149. Fortin T, Bosson JL, Coudert JL, Isidori M. Reliability of preoperative planning of an image-guided system for oral implant placement based on 3-dimensional images: an in vivo study. *Int J Oral Maxillofac Implants* 2003;18(6):886-93.

150. Kramer FJ, Baethge C, Swennen G, Rosahl S. Navigated vs. conventional implant insertion for maxillary single tooth replacement. *Clin Oral Implants Res* 2005;16(1):60-8.
151. Wanschitz F, Birkfellner W, Watzinger F, Schopper C, Patruta S, Kainberger F, et al. Evaluation of accuracy of computer-aided intraoperative positioning of endosseous oral implants in the edentulous mandible. *Clin Oral Implants Res* 2002;13(1):59-64.
152. Siessegger M, Schneider BT, Mischkowski RA, Lazar F, Krug B, Klesper B, et al. Use of an image-guided navigation system in dental implant surgery in anatomically complex operation sites. *J Craniomaxillofac Surg* 2001;29(5):276-81.
153. Gaggl A, Schultes G. Assessment of accuracy of navigated implant placement in the maxilla. *Int J Oral Maxillofac Implants* 2002;17(2):263-70.
154. Bahat O. Surgical planning. *J Calif Dent Assoc* 1992;20(5):31-46.
155. Zinner ID, Small SA, Panno FV. Presurgical prosthetics and surgical templates. *Dent Clin North Am* 1989;33(4):619-33.
156. Peters P, Langlotz F, Nolte LP. Computer assisted screw insertion into real 3D rapid prototyping pelvis models. *Clin Biomech (Bristol, Avon)* 2002;17(5):376-82.
157. Parel SM, Triplett RG. Interactive imaging for implant planning, placement, and prosthesis construction. *J Oral Maxillofac Surg* 2004;62(9 Suppl 2):41-7.
158. Casap N, Wexler A, Persky N, Schneider A, Lustmann J. Navigation surgery for dental implants: assessment of accuracy of the image guided implantology system. *J Oral Maxillofac Surg* 2004;62(9 Suppl 2):116-9.
159. Sarment DP, Sukovic P, Clinthorne N. Accuracy of implant placement with a stereolithographic surgical guide. *Int J Oral Maxillofac Implants* 2003;18(4):571-7.

160. Walton JN, Huizinga SC, Peck CC. Implant angulation: a measurement technique, implant overdenture maintenance, and the influence of surgical experience. *Int J Prosthodont* 2001;14(6):523-30.
161. Khoury G. Ein neues, flexibel einsetzbares Parallelimplantat-Bohrungsinstrument. *Quintessenz Implantologie* 1999:309-11.
162. Solar P, Gahleitner A. [Dental CT in the planning of surgical procedures. Its significance in the oro-maxillofacial region from the viewpoint of the dentist]. *Radiologe* 1999;39(12):1051-63.
163. Wheeler SL, Vogel RE, Casellini R. Tissue preservation and maintenance of optimum esthetics: a clinical report. *Int J Oral Maxillofac Implants* 2000;15(2):265-71.
164. Goodacre CJ, Kan JY, Rungcharassaeng K. Clinical complications of osseointegrated implants. *J Prosthet Dent* 1999;81(5):537-52.
165. Wismeijer D, van Waas MA, Vermeeren JI, Kalk W. Patients' perception of sensory disturbances of the mental nerve before and after implant surgery: a prospective study of 110 patients. *Br J Oral Maxillofac Surg* 1997;35(4):254-9.
166. Takacs G. [Preoperative and surgical protocols for better implant integration]. *Int J Dent Symp* 1994;2(1):28-31.
167. Rosenfeld AL, Mecal RA. The use of interactive computed tomography to predict the esthetic and functional demands of implant-supported prostheses. *Compend Contin Educ Dent* 1996;17(12):1125-8, 1130-2 passim; quiz 1146.
168. Witkowski S WD. Röntgenschablonen und bildgebende Verfahren in der prothetisch orientierten Implantologie. *Quintessenz Zahntech* 1996:1298-1316.
169. Saba S. Occlusal stability in implant Prosthodontics. *J Can Dent Assoc* 2001:522-6.
170. Melsen B, Lang NP. Biological reactions of alveolar bone to orthodontic loading of oral implants. *Clin Oral Implants Res* 2001;12(2):144-52.

171. Sahin S, Cehreli MC, Yalcin E. The influence of functional forces on the biomechanics of implant-supported prostheses--a review. *J Dent* 2002;30(7-8):271-82.
172. Balshi TJ, Wolfinger GJ. Immediate loading of dental implants in the edentulous maxilla: case study of a unique protocol. *Int J Periodontics Restorative Dent* 2003;23(1):37-45.
173. Ganeles J, Rosenberg MM, Holt RL, Reichman LH. Immediate loading of implants with fixed restorations in the completely edentulous mandible: report of 27 patients from a private practice. *Int J Oral Maxillofac Implants* 2001;16(3):418-26.
174. Marchack CB. An immediately loaded CAD/CAM-guided definitive prosthesis: a clinical report. *J Prosthet Dent* 2005;93(1):8-12.
175. Kosinski TE, Skowronski R, Jr., Wolfinger GJ, Balshi TJ, Rangert B. Immediate implant loading: a case report. Immediate functional loading of Branemark system implants in edentulous mandibles: clinical report of the results of developmental and simplified protocols. *J Oral Implantol* 2002;28(2):87-91.
176. Engstrand P, Grondahl K, Ohrenell LO, Nilsson P, Nannmark U, Branemark PI. Prospective follow-up study of 95 patients with edentulous mandibles treated according to the Branemark Novum concept. *Clin Implant Dent Relat Res* 2003;5(1):3-10.
177. Brunski JB. Biomechanical factors affecting the bone-dental implant interface. *Clin Mater* 1992;10(3):153-201.
178. Brunski JB. In vivo bone response to biomechanical loading at the bone/dental-implant interface. *Adv Dent Res* 1999;13:99-119.
179. Glauser R, Ree A, Lundgren A, Gottlow J, Hammerle CH, Scharer P. Immediate occlusal loading of Branemark implants applied in various jawbone regions: a prospective, 1-year clinical study. *Clin Implant Dent Relat Res* 2001;3(4):204-13.

180. Glauser R, Lundgren AK, Gottlow J, Sennerby L, Portmann M, Ruhstaller P, et al. Immediate occlusal loading of Branemark TiUnite implants placed predominantly in soft bone: 1-year results of a prospective clinical study. *Clin Implant Dent Relat Res* 2003;5 Suppl 1:47-56.
181. Kniha H. Die Konzeption der CT-gestützten Navigation bei der dentalen Implantatinsertion. *Quintessenz Zahntechnik* 2003:842-863.
182. Metson R, Gliklich RE, Cosenza M. A comparison of image guidance systems for sinus surgery. *Laryngoscope* 1998;108(8 Pt 1):1164-70.
183. Vougioukas VI, Hubbe U, Hochmuth A, Gellrich NC, Van Velthoven V. Perspectives and limitations of image-guided neurosurgery in pediatric patients. *Childs Nerv Syst* 2003.
184. Watzke O, Kalender WA. A pragmatic approach to metal artifact reduction in CT: merging of metal artifact reduced images. *Eur Radiol* 2004;14(5):849-56.